WHAT IS CLAIMED IS:

1. A method for detecting cancer in a patient comprising the steps of:

introducing labeled antibodies or labeled AFP to a biological sample of the patient so the labeled antibodies or labeled AFP will react with AFP receptor or AFP receptor binding sites in the biological sample;

identifying AFP receptor or AFP receptor binding sites in the biological material which have reacted with the labeled antibodies or labeled AFP to determine the presence of cancer.

2. A method as described in Claim 1 including before the introducing step, there is the step of obtaining a biological sample from a body of a patient.

3. A method as described in Claim 1 wherein the introducing step includes the step of introducing antibodies labeled with radioisotope or AFP labeled with radioisotope to the biological sample of the patient so the labeled antibodies or labeled AFP will react with AFP receptor binding sites in the biological sample.

4. A method as described in Claim 1 wherein the introducing step includes the step of introducing antibodies labeled with an enzyme or AFP labeled with an enzyme to the biological sample of the patient so the labeled antibodies or labeled AFP will react with AFP receptor binding sites in the biological sample.

5. A method as described in Claim 1 wherein the introducing step includes the step of introducing antibodies labeled with a fluorochrome or AFP labeled with a fluorochrome to the biological sample of the patient so the labeled antibodies or labeled AFP will react with AFP receptor binding sites in the biological sample.

6. A method as described in Claim 3 wherein the identifying step includes the step of identifying the radioactivity present in the biological sample.

7. A method as described in Claim 6 wherein the identifying step includes the step of measuring a radioactive count from the biological sample.

8. A method as described in Claim 6 wherein the identifying step includes the steps of coating the biological sample with a photographic emulsion, developing the photographic emulsion and observing the biological sample with the coating.

9. A method as described in Claim 6 wherein the biological sample is the patient and the introducing step includes the step of injecting the patient with the antibody labeled with radioisotope or AFP labeled with radioisotope.

10. A method as described in Claim 4 wherein the antibody labeled with enzyme or AFP labeled with enzyme change the color of the biological specimen, and the identifying step includes the step of comparing the color of the biological specimen with a known color to determine the presence of cancer.

11. A method as described in Claim 10 wherein the enzyme is peroxidase, and wherein the introducing step includes the step

of introducing the antibody labeled with peroxidase to tissue of the patient.

12. A method as described in Claim 10 wherein the introducing step includes the steps of placing a drop of the biological sample onto a location on nitrocellulose or nylon, and adding antibody labeled with peroxidase to the location, and the identifying step includes the step of determining whether the location on the nitrocellulose or nylon has changed color.

13. A method as described in Claim 4 wherein the antibody labeled with enzyme or AFP labeled with enzyme release ions which change the electrical conductance of solution in which the biological sample is disposed, and the identifying step includes the step of measuring the electrical conductance of the solution to determine the presence of cancer in the biological sample.

14. A method as described in Claim 5 wherein the identifying step includes the steps of irradiating the biological sample with UV light, and measuring photon emission from the irradiated biological sample.

15. A method as described in Claim 1 wherein the antibodies are monoclonal antibodies.

16. A method as described in Claim 1 wherein the antibodies are polyclonal antibodies.

17. A method as described in Claim 1 wherein the biological sample is blood, saliva, tissue, serum, mucus, sputum, urine, or tears or material containing cancer cells.

18. A method as described in Claim 1 wherein the biological sample is a tissue section.

19. A method as described in Claim 1 wherein the biological sample is a smear of biological material containing cancer cells on a slide, and the identifying step includes the step of examining the smear with a microscope or by flurocytometry.

20. A method as described in Claim 18 wherein the tissue section is from either fixative tissue, fresh tissue or frozen tissue.

21. A method for treating cancer cells in a patient comprising the steps of:

introducing AFP receptor antibodies to cancer cells in the patient; and

reacting the AFP receptor antibodies with the AFP receptor of the cancer cells to inhibit growth of the cancer cells or kill the cancer cells.

22. A method as described in Claim 21 wherein the introducing step includes the step of injecting the AFP receptor antibodies into the patient.

23. A method as described in Claim 22 wherein the injecting step includes the step of injecting through an IV into the patient's blood stream the AFP receptor antibodies.

24. A method as described in Claim 22 wherein the injecting step includes the step of injecting the AFP receptor

antibodies into the patient at a location in proximity to the cancer cells.

25. A method as described in Claim 21 wherein the introducing step includes the step of vaccinating the patient against cancer cells.

26. A method as described in Claim 25 wherein the vaccinating step includes the step of injecting AFP receptor of a species different than the patient into the patient to cause AFP receptor antibodies to be produced by the patient against the injected AFP receptor, said AFP receptor antibodies produced by the patient also cross-reacting with AFP receptor of cancer cells in the patient.

27. A method as described in Claim 21 wherein the reacting step includes the step of reacting AFP receptor of cancer cells of the patient with AFP receptor antibodies so the AFP receptor of the cancer cells are blocked or functionally impaired.

28. A method as described in Claim 21 wherein the AFP receptor antibodies are AFP receptor antibodies which fix complement, and wherein the reacting step includes the step of reacting the AFP receptor antibodies which fix complement to the cancer cell so when complement chain reaction occurs, holes are punctured into the cancer cell's membrane which kill the cancer cell.

29. A method as described in Claim 21 wherein the AFP receptor antibodies are conjugated to drugs or toxins, and wherein the reacting step includes the step of reacting the AFP receptor antibodies conjugated with drugs or toxins to the cancer cell so the cancer cells engulf the drugs or toxins into the cancer cells

where enzymes of the cancer cells cut the drugs or toxins free from the antibodies causing the cell to be irreversibly damaged and killed.

30. A method as described in Claim 21 wherein the AFP receptor antibodies are radiolabelled, and the reacting step includes the step of reacting the radiolabelled AFP receptor antibodies with cancer cells in the patient so radiation from the radiolabelled AFP receptor antibodies at a short distance from the cancer cell's DNA damages the DNA thus inducing death in the cancer cells.

31. A method as described in Claim 21 wherein the antibodies are monoclonal antibodies, polyclonal antibodies, antibodies from a species different than the patient, or antibodies produced in-vitro from lymphocytes of the same species as the patient.

32. A method for monitoring a patient comprising the steps of:

treating the patient for cancer; and

testing the patient at predetermined intervals after the treatment for AFP receptor site levels.

33. A method for treating a patient comprising the steps of:

testing the patient for AFP receptor;

introducing AFP receptor antibodies or AFP into the patient to react with cancer cells in the patient if the testing indicates AFP receptor are in the patient.

34. A method for treating cancer cells in a patient comprising the steps of:

introducing modified AFP to cancer cells in the patient; and

reacting the modified AFP with the AFP receptor of the cancer cells to inhibit growth of the cancer cells or kill the cancer cells.

35. A method as described in Claim 34 wherein the introducing step includes the step of injecting the modified AFP into the patient.

36. A method as described in Claim 35 wherein the injecting step includes the step of injecting through an IV into the patient's blood stream the modified AFP.

37. A method as described in Claim 35 wherein the injecting step includes the step of injecting the modified AFP into the patient at a location in proximity to the cancer cells.

38. A method as described in Claim 34 wherein the reacting step includes the step of reacting AFP receptor of cancer cells of the patient with modified AFP so the AFP receptor sites of the cancer cells are blocked or functionally impaired.

39. A method as described in Claim 34 wherein the modified AFP is synthetically produced or is a part of AFP.